

## DOCUMENT RESUME

ED 279 970

CG 019 779

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TITLE Third Year Trends in Compliance with Recommended Health Seeking Behaviors.  
PUB DATE Sep 86  
NOTE 11p.; Paper presented at the Annual Meeting of the American Public Health Association (114th, Las Vegas, NV, September 28-October 2, 1986).  
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS Adults; \*Behavior Patterns; \*Eating Habits; \*Health Activities; National Surveys; Nutrition; \*Prevention; \*Restrains (Vehicle Safety); Trend Analysis  
IDENTIFIERS \*Health Promotion

## ABSTRACT

Beginning in 1983, a national poll has been conducted annually to assess the extent to which the American public engaged in a core of 21 recommended health seeking behaviors. For the third consecutive year a national sample of approximately 1250 adults were interviewed concerning their self-reported compliance with a basic core of 21 health seeking behaviors. Identical sampling methodologies (i.e., a stratified random digit dialing procedure stratified by geographic region and place of residence therein) and identical behavioral wording were employed across surveys. As reported in 1985, statistically significant changes were observed between the first (1983) and second (1984) years, both with respect to an overall composite score based on all 21 behaviors and for a number of individual behaviors. Although a numerical improvement was observed for the 1985 composite score as compared to 1984 data, this difference did not reach statistical significance. From an individual perspective, however, two behaviors did register dramatic and statistically significant improvement over the preceding year: respondents reporting always using a seatbelt rose from 27% in 1984 to 41% in 1985 (the comparable figure was only 19% in 1983) and individuals reporting trying very hard to consume adequate amounts of calcium rose from 45% to 57% (65% among women). Overall, these trends continue to be encouraging, although obviously a great deal of room for improvement remains. (Author/NB)

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Third Year Trends in Compliance with Recommended  
Health Seeking Behaviors

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## Abstract

For the third year in a row a national sample of approximately 1250 adults were interviewed by Louis Harris and Associates concerning their self-reported compliance with a basic core of 21 health seeking behaviors. Identical sampling methodologies (i.e., a stratified random digit dialing procedure stratified by geographic region and place of residence therein) and identical behavioral wording were employed across surveys. As reported at the 1985 meeting, statistically significant changes were observed between the first (1983) and second (1984) years, both with respect to an overall composite score based on all 21 behaviors and for a number of individual behaviors. Although a numerical improvement was observed for this year's composite score as compared to last year's data, this difference did not reach statistical significance. From an individual perspective, however, two behaviors did register dramatic (and statistically significant) improvements over the past year: respondents reporting always using a seatbelt rose from 27% in 1984 to 41% in 1985 (the comparable figure was only 19% in 1983) and individuals reporting trying very hard to consume adequate amounts of calcium rose from 45% to 57% (65% among women). Overall these trends continue to be encouraging although obviously a great deal of room for improvement remains.

### Third Year Trends in Compliance with Recommended Health Seeking Behaviors

Beginning in the fall of 1983 Rodale Press commissioned Louis Harris and Associates to conduct a national poll designed to assess the extent to which the American public engaged in a core of 21 recommended health seeking behaviors. Exactly one year later a second poll employing an identical sampling methodology and an identical behavioral core was conducted in order to begin the tracking of individual preventive efforts for the country as a whole on an annual basis. The results of this second survey were reported in last year's meeting and, to review, basically showed statistically significant shifts in compliance with seven individual behaviors as well as a total compliance score based upon an average of all 21 behaviors.

These statistically significant results were as follows:

- (1) persons reporting that they had their blood pressures checked at least annually, owned a smoke detector, took steps to control their stress, tried very hard to restrict their fat intake, took steps to avoid home accidents, and always wore their seatbelts increased on an average of 5.5% for each behavior,
- (2) persons reporting that they tried very hard to consume adequate vitamins and minerals (either via supplements or in their daily diets) decreased 6%, and
- (3) the average percent of compliance with all 21 behaviors increased from 61.2% to 62.8% (which was statistically significant at the .05 level).

The purpose of the present paper is to report those changes in self-reported preventive compliance observed during the third year of this project, again both with respect to the 21 individual behaviors and with respect to the total preventive score.

## Method

### Sample

All three surveys consisted of 1250 respondents contacted by a random digit dialing procedure stratified by geographical region and metropolitan versus nonmetropolitan area within those regions. In all three surveys a multiple callback procedure resulted in an average response rate of over 70%. As would be expected from such a sampling framework, demographic characteristics were very similar for all three samples and were quite representative of the telephone population of the United States itself.

### Behaviors

The 21 behaviors selected for inclusion were designed to meet the following criteria:

- (1) Only behaviors subject to personal modification were employed. This meant that some critical concerns such as air and water quality were omitted in favor of individual preventive acts such as not smoking or using seatbelts.
- (2) Only behaviors were selected for which some empirical evidence existed linking compliance with one or more health outcomes. To further ensure some degree of consensus with respect to this evidence, a sample of 100 public health professionals were asked to rate each behavior with respect to its overall public health importance. Only behaviors receiving relatively high ratings (e.g., the lowest rated behavior received a mean rating of 6.9 on a ten-point scale) were included.
- (3) Only behaviors applicable to the entire adult population were examined. (Actually data is also available on breast self-exams and Pap smears, but will not be discussed in the present paper.) For some behaviors such as going to the dentist for a check-up, compliance was defined as at least once/year. For others such as the dietary items, compliance was defined as "try a lot" to avoid, for example, too much sugar.

The actual behaviors employed, along with their compliance/noncompliance definitions, are presented in Table 1.

## Results

### Individual Behaviors

To begin with, only two of the behaviors registered statistically significant shifts from 1984 to 1985. These were (1) the proportion of people reporting that they always used their seatbelts (which rose from 19% in 1983 to 27% in 1984 to 41% in 1985, and (2) the proportion of people reporting that they tried very hard to consume adequate amounts of calcium (which rose from 45% to 57% from 1984 to 1985 - 65% of the women in the sample reported increased efforts in this regard). Both of these behaviors have received considerable media attention during the interval between the two surveys (seatbelts with respect to increased state legal mandates; calcium with respect to increased awareness of the incidence of osteoporosis among women), thus it is tempting to ascribe these gains to that source. This may not be the case, of course, since the consumption of cholesterol has not changed substantively from 1983 despite considerable media attention.

Of the six significant changes from 1983 to 1984 (seatbelts have already been discussed with compliance increasing both from 1983 to 1984 and from 1984 to 1985), four others - namely avoiding home accidents, having blood pressure screened, owning smoke detectors, and controlling stress - all retained their 1984 advantage. In addition, the single negative change from 1983 to 1984 (trying very hard to consume adequate vitamins and minerals) reverted back to the superior 1983 level (i.e., 63% reporting compliance). Unfortunately, however, the salutary change in restricting fat observed last year slipped

this year almost back to its 1983 levels (56% versus 55%), narrowly averting a statistically significant decrease.

As indicated in Table 2, a number of other interesting (if not statistically significant) trends were apparent. The number of people who report that no one in their household smokes in bed has risen all three years with the 1985 level (91%) being statistically greater than the 1983 level (88%). Drivers who say they never drive after drinking did increase numerically this year for the first time (72% to 75%), but on the negative side of the ledger a continued trend toward speeding was observed across the three surveys: 56% reporting that they never exceeded the speed limit in 1983, down to 52% in 1984, down to 50% in 1985 (the difference between 1985 and 1983 was statistically significant).

#### Overall Compliance

Although trends in individual preventive behaviors are interesting in and of themselves, the primary purpose of this study was to document and study the total preventive output of the nation as a whole. Last year we made a psychometric argument for viewing these behaviors as a single construct, and although not conventional, at least demonstrated that the overall measure possessed sufficient internal consistency ( $\alpha = .58$ ) to be useful for research purposes.

From 1983 to 1984 the overall rate of compliance increased from 61.2% to 62.8%. In 1985 the overall rate rose slightly to 63.3%, an average rise for the 21 behaviors of one half of a percent. Although this modest increase from 1984 was not statistically significant, it was statistically greater than the 1983 value and the three means differed from one another when considered as a single analysis of variance.

We therefore interpret these results as indicative that the American public continues to improve modestly with respect in their health seeking behavior. This of course is good news for all of us, and sufficient reason for us to increase our health promotional efforts in the years to come.



Compliance Definitions for the 21 Behavioral Items

<u>Item</u>	<u>Definition</u>
1. How often do you have a blood pressure reading?	At least once a year.
2. How often do you go to the dentist for treatment or a checkup?	At least once a year.
<u>Thinking about your personal diet and nutrition, do you try a lot, try a little, or don't you try at all to:</u>	
3. Avoid eating too much salt or sodium.	Try a lot.
4. Avoid eating too much fat.	Try a lot.
5. Eat enough fiber from whole grains, cereals, fruits, and vegetables.	Try a lot.
6. Avoid eating too many high-cholesterol foods, such as eggs, dairy products, and fatty meats.	Try a lot.
7. Get enough vitamins and minerals in foods or in supplements.	Try a lot.
8. Avoid eating too much sugar and sweet food.	Try a lot.
9. In feet and inches, what is your height without shoes on? What is your present weight without clothes? What kind of body frame or bone structure would you say you have - small, medium, or large?	In range based upon Metropolitan Life Insurance tables.
10. How often do you exercise strenuously - that is, so you breathe heavily and your heart and pulse rate are accelerated for a period lasting at least twenty minutes?	At least 3 times/week.
11. Do you smoke cigarettes now or not?	Do not smoke.
12. Do you consciously take steps to control or reduce the stress in your life?	Take steps.
13. How many hours do you <u>usually</u> sleep each 24-hour day in total?	7-8 Hours.
14. In general how often do you consume alcoholic beverages? On a day when you do drink alcoholic beverages, on average, how many drinks do you have? (By a "drink" we mean a drink with a shot of hard liquor, a can or bottle of beer, or a glass of wine.)	No more than 4 drinks per day for a total of no more than 15 per week.
15. How often do you wear a seatbelt when you are in the front seat of a car - all the time, sometimes, or never?	Always.
16. How often do you drive above the speed limit?	Never does so.
17. How often do you <u>drive</u> after drinking alcoholic beverages?	Never does so.
18. Do you have a smoke detector in your home.	Yes, owns one.
19. Does anyone in your household ever smoke in bed?	No one does.
20. Do you take any special steps or precautions to avoid accidents in and around your home?	Yes, takes steps.
21. About how often do you socialize with close friends, relatives, or neighbors?	At least once a week.

Table 2

Mean Compliances for the Three Surveys\*

<u>Behaviors</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
1. Avoid Smoking/Ped	88%	89%	91%
2. Moderate Alcohol	88%	87%	88%
3. Socialize Regularly	83%	85%	85%
4. Not Smoking	70%	72%	70%
5. Avoid Home Accidents	72%	81%	80%
6. Blood Pressure Screen	82%	85%	86%
7. Avoid Drive/Drink	72%	72%	75%
8. Smoke Detector	82%	85%	86%
9. Control Stress	68%	74%	73%
10. Dental Exam	71%	72%	74%
11. Restrict Fat	35%	59%	56%
12. Obey Speed Limit	62%	58%	56%
13. Consume Fiber	59%	59%	59%
14. 7-8 Hours Sleep	64%	63%	64%
15. Adequate Vit/Min	63%	57%	63%
16. Restrict Sodium	53%	54%	54%
17. Restrict Sugar	51%	52%	50%
18. Restrict Cholesterol	42%	43%	42%
19. Exercise	34%	33%	30%
20. Seatbelt	19%	27%	41%
21. Maintain Weight	23%	23%	21%
<u>TOTAL</u>	<u>61.2%</u>	<u>62.8%</u>	<u>63.3%</u>

\*Please note that these compliance figures are in terms of the definitions listed in Table 2 and do not necessarily reflect all the values discussed in the text (e.g., here the obeying the speed limit value of 56% for 1985 includes both drivers and nondrivers, the latter counted as compliant). Note also that calcium was not included in the overall 21 behavioral total. Had it been, the average gain would have been slightly higher but not statistically significant.

